

CLAIMS AMENDMENTS

1-38. (CANCELLED)

39. (NEW) A method for determining patency of the airway of a patient during the delivery of continuous positive airway pressure treatment, the method comprising the steps of:

- measuring respiratory air flow from a patient;
- determining airway patency by an analysis of said measured air flow to detect the presence of cardiogenic air flow; and
- delivering airway treatment pressure based upon said determination of airway patency.

40. (NEW) The method of claim 39 wherein said airway treatment pressure is increased if said cardiogenic air flow is not present.

41. (NEW) The method of claim 40 wherein said airway treatment pressure is decreased or unchanged if said cardiogenic air flow is present.

42. (NEW) The method of claim 41 further comprising the step of filtering said respiratory airflow to reject unwanted components of respiration.

43. (NEW) The method of claim 39 wherein said analysis includes performing a fourier transform on said measured air flow.

44. (NEW) The method of claim 43 further comprising the step of determining the patient's cardiac rate, and said determining step includes detecting a component of said air flow at the cardiac rate.

45. (NEW) An apparatus for determining patency of an airway of a patient, the

apparatus comprising:

a pressure transducer for generating an air flow signal representative of respiratory air flow from the patient; and

a processor with instructions for determining if the airway is patent by an analysis of said air flow signal to detect the presence of cardiogenic air flow.

46. (NEW) The apparatus of claim 45 further comprising a turbine controllable to provide a supply of breathable gas at a desired pressure elevated above atmospheric wherein said desired pressure is increased if said cardiogenic air flow is not present.

47. (NEW) The apparatus of claim 46 wherein said desired pressure is decreased or unchanged if said cardiogenic air flow is present.

48. (NEW) The apparatus of claim 47 wherein said analysis includes performing a fourier transform on said measured air flow.

49. (NEW) The apparatus of claim 48 further comprising a pulse oximeter and said instructions further determine the patient's cardiac rate from said pulse oximeter, and said instructions for determining control a detection of a component of said air flow signal at the cardiac rate.

50. (NEW) An apparatus for determining patency of an airway of a patient, the apparatus comprising:

means for generating an air flow signal representative of respiratory air flow from the patient; and

a means for determining if the airway is patent by an analysis of said air flow signal to detect the presence of cardiogenic air flow.

51. (NEW) The apparatus of claim 50 further comprising a means for supplying a breathable gas at a desired pressure elevated above atmospheric wherein said desired pressure is increased if said cardiogenic air flow is not present.

52. (NEW) The apparatus of claim 51 wherein said desired pressure is decreased or unchanged if said cardiogenic air flow is present.

53. (NEW) The apparatus of claim 52 wherein said analysis includes performing a fourier transform on said measured air flow.

54. (NEW) The apparatus of claim 53 further comprising means for identifying the patient's cardiac rate, and said means for determining detects a component of said air flow at the cardiac rate.